JOURNAL OF ELECTROANALYTICAL CHEMISTRY

Vol. 355 Nos. 1 and 2 30 AUGUST 1993

**Dedicated to Professor Brian Conway to celebrate his 65th birthday**

CONTENTS

An introduction for the special issue of J. Electroanal. Chem. in honour of Professor B.E. Conway.
V.I. Birss and D.F. Tessier ..... 1

Ac voltammetry for measurement of surface kinetics
D.A. Harrington (Victoria, BC, Canada) ..... 21

Behaviour of a hydride phase formed in the hydrogen evolution reaction at a rotating Pt electrode: analysis of potential relaxation transients from a kinetic approach
L. Bai (Ottawa, Ont., Canada) ..... 37

Temperature dependence of symmetry factors and the significance of experimental activation energies
A. Damjanovic (Morristown, NJ, USA) ..... 57

Reversibility and irreversibility in the formation and reduction of oxide film states on Co at ambient and low temperatures
R.P. Šimpraga (Ottawa, Ont., Canada) ..... 79

Electrochemical and spectroscopic studies of Solochrome Violet RS
M. Ma and K.E. Johnson (Regina, Sask., Canada) ..... 97

Observation of soluble pyrrole oligomers and the role of protons in the formation of polypyrrole and polybipyrrole
D.E. Raymond and D.J. Harrison (Edmonton, Alta., Canada) ..... 115

Composition–property relationships for poly((3-methylthiophene)-co-(1-methyl-3-(pyrrol-1-ylmethyl)pyridinium)) electronically conducting ionomer films
Z. Qi and P.G. Pickup (St. John's, Nfld., Canada) ..... 133

Probing pyridine adsorbed at gold electrodes by chronocoulometry, radiochemistry and Raman spectroscopy
J. Lipkowski, L. Stolberg, S. Morin (Guelph, Ont., Canada), D.E. Irish (Waterloo, Ont., Canada), P. Zelenay, M. Gamboa and A. Wieckowski (Urbana, IL, USA) ..... 147

Underpotential deposition of thallium(I) on electropolished copper in aqueous solutions
D.A. Berg, D.S. Nadezdhin and R.G. Barradas (Ottawa, Ont., Canada) ..... 165

Platinum oxide film formation–reduction: an in-situ mass measurement study
V.I. Birss, M. Chang and J. Segal (Calgary, Alta., Canada) ..... 181

In-situ study of electrode stack growth in rechargeable cells at constant pressure
D.P. Wilkinson and D. Wainwright (Burnaby, BC, Canada) ..... 193

Voltammetric study of ammonium amalgam
A. Baranski and W. Lu (Saskatoon, Sask., Canada) ..... 205

The electrohydrogenation of 2-iodonitrobenzene at mercury and Raney metal electrodes in aqueous methanol
B.J. Coté, D. Despres, R. Labrecque, J. Lamothe, J.-M. Chapuzet and J. Lessard (Québec, Que., Canada) ..... 219

Oxometalate-clay-modified electrodes: synthesis and properties of anionic clays pillared by metatungstate
B. Keita, A. Belhouari and L. Nadjo (Orsay, France) ..... 235

The role of dipole–dipole interactions in the solvation of monoatomic monovalent ions in water on the basis of the mean spherical approximation
W.R. Fawcett (Davis, CA, USA) and L. Blum (Rio Piedras, PR, USA) ..... 253

Alkali metal + macrocyclic ligand complexes in a 36 mass% mixture of propylene carbonate in dichloromethane
M. Salomon (Fort Monmouth, NJ, USA) ..... 265

Phase diagrams, molar volumes, heat capacities, conductivities and viscosities of some lithium salts in aprotic solvents
G. Perron, L. Couture, D. Lambert and J.E. Desnoyers (Boucherville, Que., Canada) ..... 277

Activity coefficients of sodium bromide in alkaline earth bromides plus water systems at 298 K
S. Sarada, S. MacNeil and R. Palepu (Sydney, NS, Canada) ..... 297

*Author index* ..... 309

*Subject index* ..... 311